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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/816,260	03/31/2004	Mark S. Isenberger	42P17808	9840
8791	7590	09/29/2005	EXAMINER	
BLAKELY SOKOLOFF TAYLOR & ZAFMAN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR LOS ANGELES, CA 90025-1030			NGUYEN, VIET Q	
			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/816,260

Applicant(s)

ISENBERGER ET AL.

Examiner

Viet Q. Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-10 and 21-32 is/are allowed.
- 6) ☒ Claim(s) 11, 12 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 13 and 14 is/are objected to.
- 8) ☒ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. Claims **1-32** are present for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims **11-12, 15, 17-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Komon (JP405221139A)**.

Komon (read constitution) teaches a method for heating a ferroelectric polymer film above the Curie temperature point such that the ferroelectric polymer film can be crystallized after cooling down. The "on-chip" heater is obviously the disclosed "anodized aluminum" as metal sheet, and it is heated at 1200 to 1600 and subsequently cooled gradually thus crystallizing the polymer film.

Regarding claim 12, the film is exposed to the "Corona" electric field during cooling stage;

Regarding claim 15, line 1 (constitution) clearly stated that such polymer film material is mainly composed of "vinylidene fluoride" material;

Regarding claim 17 & 18, the temperature is in the range of 1200 to 1600, which obviously include the claimed range of 1300 to 1500 as claimed;

4. Claims **11, 15-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Yamaguchi et al (JP403278071A)**.

Yamaguchi et al (read constitution) teaches a method for heating a ferroelectric polymer film above the Curie temperature point such that the ferroelectric polymer film can be crystallized after cooling down. Fig. 1-3 obviously shows the process heating using on-chip heating element for this ferroelectric polymer film, and it is heated at 1200 to 1600, and subsequently cooled gradually thus crystallizing the polymer film.

Regarding claim 15 & 16, line 1 (constitution) clearly stated that such polymer film material is mainly composed of "fluoride-vinylidene trifluoride copolymer" material;

5. Other claims contain allowable subject matter over the prior arts of record for the following reasons:


- Claims **1-10** recite the use of such heating process for a "ferroelectric polymer memory" device, which is not fairly suggested or seen elsewhere;
- Claims **13-14** are objected as being dependent upon rejected claim **11**; however, recites the use of the on-chip temperature detector;
- Claims **19-20** recites the specific timing for the heating process;
- Claims **21-32** are allowable for reciting a method for "annealing, with an on-chip heater, a polymer ferroelectric memory device", which is not taught in any prior art.

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6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Q. Nguyen whose telephone number is (571) 272-1788. The examiner can normally be reached on 7am-6pm (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


V. Nguyen
09/22/2005



**VIET Q. NGUYEN
PRIMARY EXAMINER**